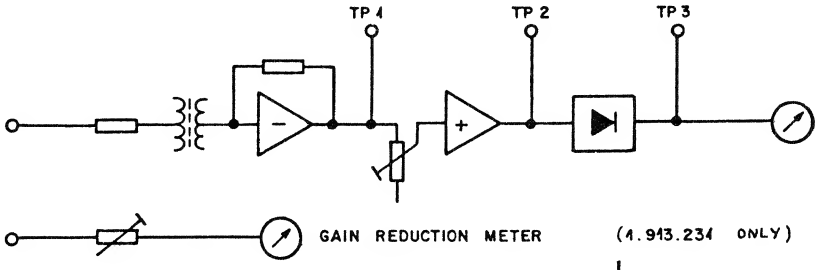
VU-METER

VU-Meter mit symmetrisch, erdfreiem und hochohmigem Eingang. Dynamische Daten gemäss IEC.

Blockschaltbild



Einmessen:

TP1: Variabel (0,1 V ... 0,35 Veff)

TP2: 1 Veff

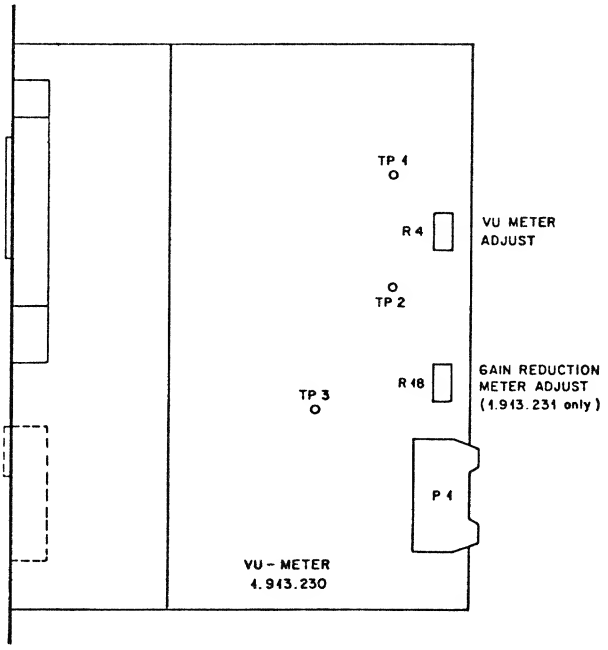
TP3: - 3,6 V p Vollweg-Gleichrichtung

Mit R 4 kann die Referenzanzeige (0 VU) für Eingangssignale zwischen 0 dBu und + 10 dBu eingestellt werden.

VU-Meter

VU-meter with balanced, floating and high-impedance input. Dynamic response according to IEC.

Block diagram



Calibration

TP1: Variable (0.1 V ... 0.35 Veff)
TP2: 1 Veff
TP3: -3.6V p full-wave rectification

The reference indication (0 VU) for input signals between 0 dBu and +10 dBu can be adjusted with R4.

TECHNISCHE DATEN

Eingangsempfindlichkeit für Referenzanzeige (0 VU)	0 dBu ... + 10 dBu
Eingangsimpedanz	> 10 kOhm
Anzeigebereich	- 20 VU ... + 3 VU
Genauigkeit bei 20°C, 1 kHz, -10 VU ... +3 VU	± 0,5 VU
Frequenzgang für Referenzanzeige 0°C ... 50°C, 31,5 Hz ... 15 kHz	± 0,5 VU
Ansprechzeit auf - 1 VU	207 ms ± 30 ms
Speisung	+ 15 V 10 mA - 15 V 10 mA - 6 V 60 mA (90 mA)

MECHANISCHE DATEN

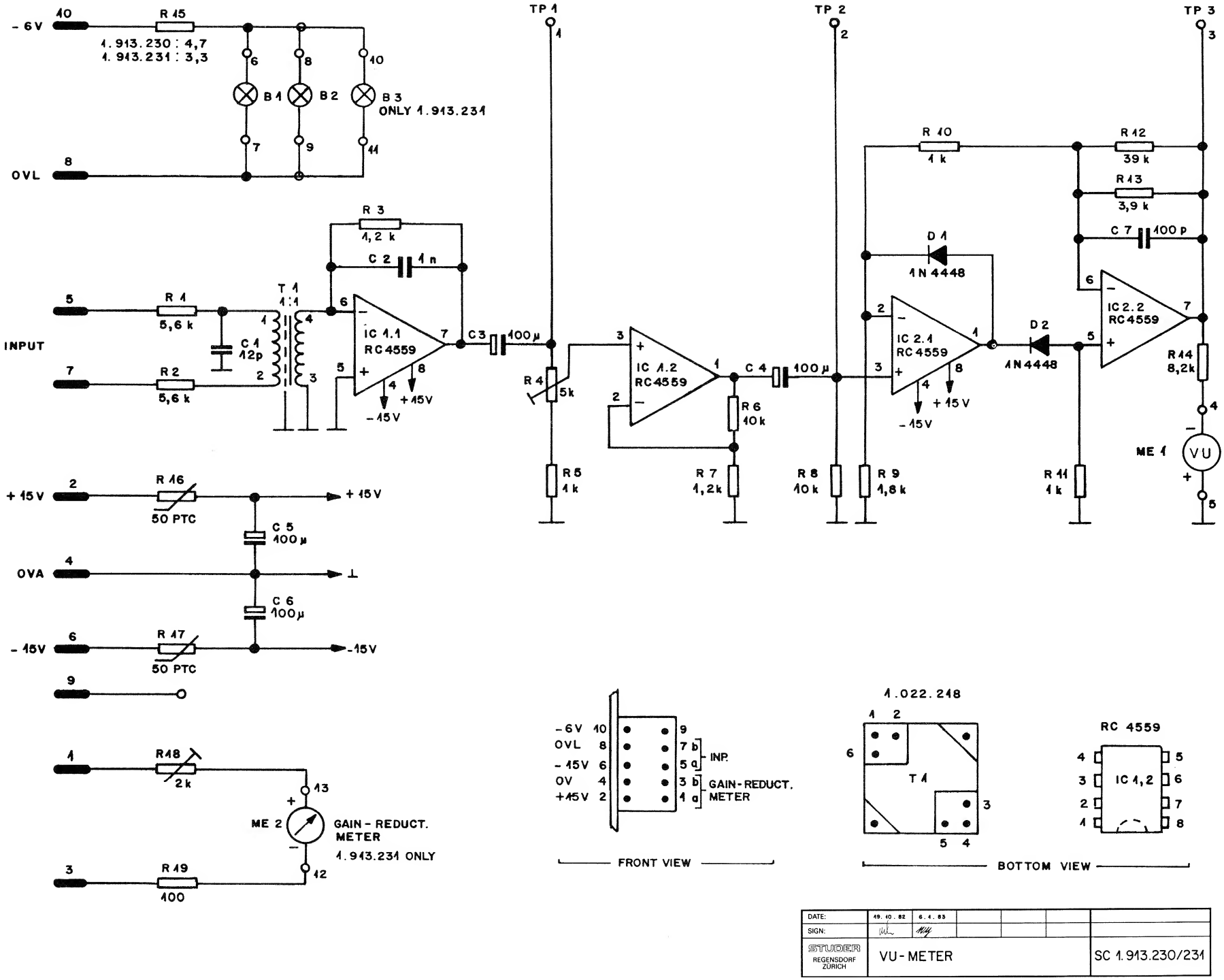
Frontplatte dunkelgrau gespritzt	
Abmessungen Frontplatte	170 x 80 mm
Tiefe	135 mm
Gewicht	310 gr

SPECIFICATIONS

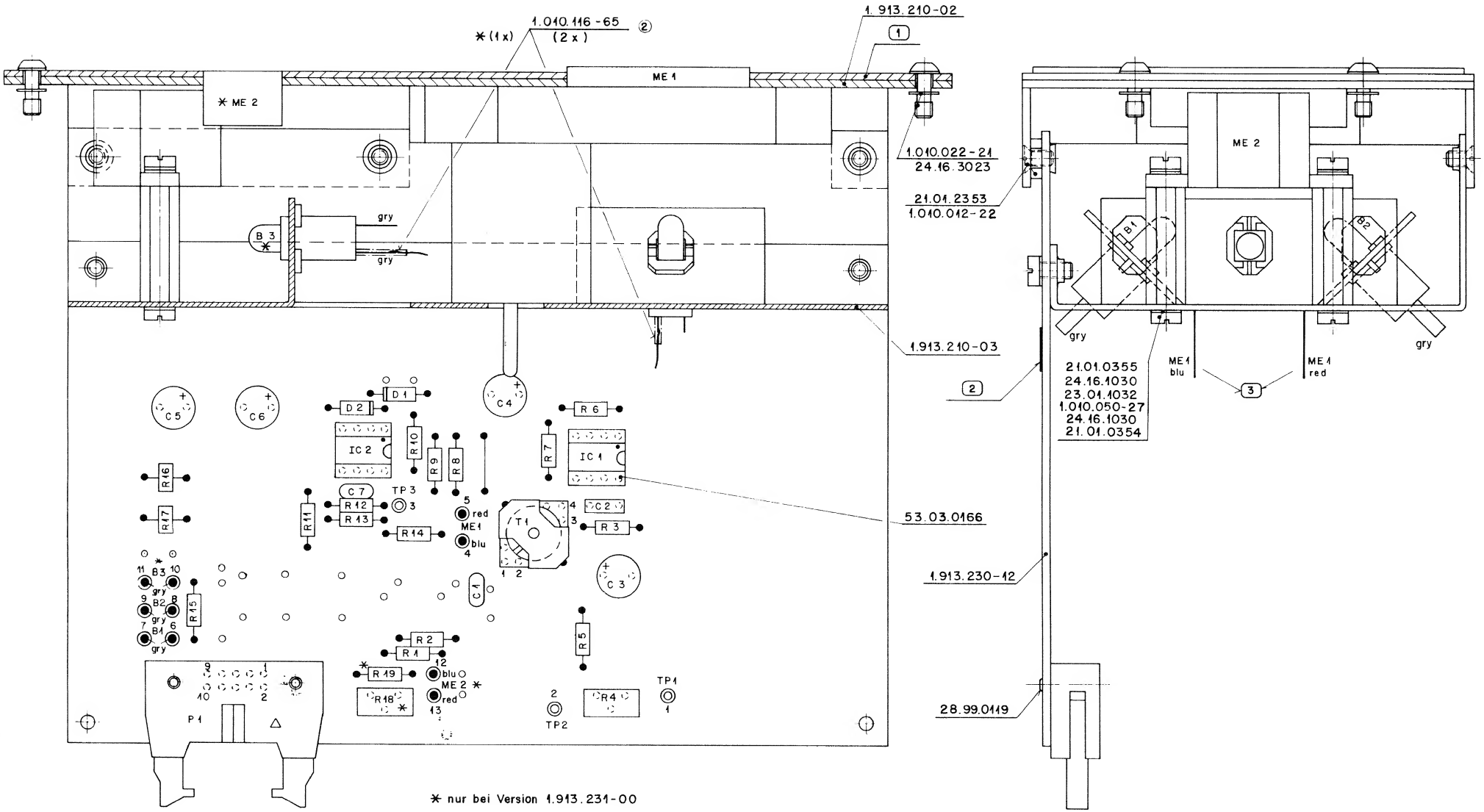
Input sensitivity for reference indication (0 VU)	0 dBu ... +10 dBu
Input impedance	>10 kOhm
Indicating range	-20 VU ... + 3 VU
Accuracy at 20°C, 1 kHz, -10 VU ... +3 VU	±0.5 VU
Frequency response for reference 0°C ... 50°C, 31.5 Hz ... 15 kHz	±0.5 VU
Attack time to -1 VU	207 ms ±30 ms
Supply	+15 V 10mA -15 V 10mA - 6 V 60mA (90mA)

PHYSICAL DATA

Front panel sprayed charcoal grey	
Dimension of front panel	170 x 80mm
Depth	135mm
Weight	310 g



DATE:	19. 10. 82	6. 4. 83				
SIGN:						
STUDER REGENSDORF ZÜRICH	VU-METER					SC 1.913.230/231



* nur bei Version 1.913.231-00

Gültig für :	①	②	③
1.913.230-00	1.913.210-01	1.913.230-04	1.913.210-93
1.913.231-00	1.913.221-01	1.913.231-04	1.913.221-93

Werkstoff: Norm-Nr.: / DIN-Bez.: / Abmessung:	Oberfläche: Gute: / Beh.:		Änderung	③
			10.12.84 A.Ho	②
			4.1.84 A.Ho	①
Zugehörige Unterlagen: PL	Freimasstoleranz: +	Maßstab: 2:1	Ausgabe 11.2.83 A.Ho	⓪
			Datum / Gez. / Gepr. / Gcs. / Index	
Ersatz für:	Ersetzt durch:		Kopie für:	
STUDER REGENSDORF ZÜRICH	Benennung: VU-Meter		Nummer: 1.913.230-00	

IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	C1	59.34.1120	12 pF	5%	
	C2	59.06.0102	1 nF	10%	
	C3	59.22.5101	100 µF	≥ 16V	
	C4	59.22.5101	100 µF	≥ 16V	
	C5	59.22.5101	100 µF	≥ 16V	
	C6	59.22.5101	100 µF	≥ 16V	
	C7	59.34.1101	100 pF	5%	
	D1	50.04.0125	1N4448		any
	D2	50.04.0125	1N4448		any
	IC1	50.09.0107	RC4559 NB	Dual OP AMP	Ra, TI
	IC2	50.09.0107	RC4559 NB	Dual OP AMP	Ra, TI
	R1	57.11.3562	5,6 k	1%	
	R2	57.11.3562	5,6 k	1%	
	R3	57.11.4122	1,2 k		
	R4	58.01.7502	5 k	TRIM-POTM.	
	R5	57.11.4102	1 k		
	R6	57.11.4103	10 k		
	R7	57.11.4122	1,2 k		
	R8	57.11.4103	10 k		
	R9	57.11.4182	1,8 k		
	R10	57.11.4102	1 k		
	R11	57.11.4102	1 k		
	R12	57.11.4393	39 k		
	R13	57.11.4392	3,9 k		
	R14	57.11.4822	8,2 k		

IND	DATE	NAME	
④			Ra Raytheon
③			TI Texas Instr.
②			also valid for VU-meter with
①			gain reduction meter 1.913.231
○	20-8-81	My	

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IND	POS NO	PART NO	VALUE	SPECIFICATIONS/EQUIVALENT	MFR
	R15	57.11.4479	4,7 Ω	1.913.231 : 3,3 Ω (57.11.4339)	
	R16	57.99.0206	50	PTC PHILIPS 2.322.661 91002	
	R17	57.99.0206	50	PTC PHILIPS 2.322.661.91002	
	R18	58.01.7202	2k	Trim-Pot. (only 1.913.231)	
	R19	57.11.4101	100	(only 1.913.231)	
	T1	1.022.218.00	1:1	Input Trafo	
	B1	51.02.0144	6V, 30mA	Lamp	
	B2	51.02.0144	6V, 30mA	Lamp	
	ME1	1.913.001.02		VU-Meter	
	ME2	1.169.900.02		Gain-Reduction Meter (only 1.913.231)	
	P1	54.14.2011		Connector 10 pins	
	XIC	53.03.0166		IC-Socket 8pins DIP	
	B3	51.02.0144	6V, 30mA	Lamp (only 1.913.231)	

IND	DATE	NAME	
④			
③			
②			also valid for VU-meter with
①			gain reduction meter 1.913.231
○	20-8-81	My	

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